What is claimed is:

1. A scanning optical system for dynamically deflecting a plurality of laser beams by a deflecting system for a plurality of scan targets which are provided corresponding to the laser beams and parallelly arranged at preset intervals, converging the dynamically deflected laser beams by an imaging optical system into spot beams on said corresponding scan targets respectively, and thereby scanning the spot beams in a main scanning direction on said corresponding scan targets respectively,

wherein said deflecting system includes at least one reflecting surface which simultaneously deflects the laser beams that are incident on the at least one reflecting surface at incident angles differing in an auxiliary scanning direction perpendicular to the main scanning direction, and

wherein said imaging optical system including:

a front lens group having positive refractive power for converging all the laser beams from said deflecting system principally in the main scanning direction while deflecting at least a pair of laser beams selected from the laser beams obliquely incident on said at least one reflecting surface so as to let the selected laser beams deviate from an optical surface reference axis of said front lens group; and

a plurality of rear lens groups each of which has positive

refractive power for converging each of the laser beams that passed through said front lens group principally in the auxiliary scanning direction.

2. The scanning optical system according to claim 1, wherein at least one surface of said front lens group has a plurality of areas of different shapes for interacting with the laser beams respectively.

3. The scanning optical system according to claim 2, wherein said at least one surface of said front lens group is formed as a step-like optical surface in which lens thickness changes at each boundary between adjacent areas.

4. The scanning optical system according to claim 2, wherein each area of said at least one surface of said front lens group is formed as a two-dimensional polynomial aspherical surface which is expressed by a polynomial expression regarding heights in the main scanning direction and the auxiliary scanning direction.

5. The scanning optical system according to claim 4, wherein said two-dimensional polynomial aspherical surface of said front lens group is asymmetric in the main scanning direction.

6. The scanning optical system according to claim 4, wherein said two-dimensional polynomial aspherical surface of said front lens group is asymmetric in the auxiliary scanning direction.

7. The scanning optical system according to claim 1, wherein surfaces on at least one side of said rear lens groups are formed so as not to be in the same shape.

8. The scanning optical system according to claim 1, wherein at least one surface of each of said rear lens groups is formed as a two-dimensional polynomial aspherical surface which is expressed by a polynomial expression regarding heights in the main scanning direction and the auxiliary scanning direction.

9. The scanning optical system according to claim 8, wherein said two-dimensional polynomial aspherical surface of each of said rear lens groups is symmetric with respect to the optical surface reference axis in the main scanning direction.

10. The scanning optical system according to claim 8, wherein said two-dimensional polynomial aspherical surface of each of said rear lens groups is asymmetric in the auxiliary scanning direction.

11. The scanning optical system according to claim 1,

wherein said pair of laser beams obliquely incident on said deflecting system travel at the same tilt angle on both sides of a main scanning plane which is defined as an imaginary plane parallel to the main scanning direction and including the optical surface reference axis of said front lens group, and

wherein rear lens groups for transmitting said pair of laser beams respectively are formed in shapes mirror-symmetrical with each other with respect to the main scanning plane as a symmetry plane.

12. The scanning optical system according to claim 1,

wherein said pair of laser beams obliquely incident on said deflecting system travel at the same tilt angle on both sides of a main scanning plane which is defined as an imaginary plane parallel to the main scanning direction and including the optical surface reference axis of said front lens group, and

wherein areas of said front lens group for interacting with said pair of laser beams respectively are formed in shapes mirror-symmetrical with each other with respect to the main scanning plane as a symmetry plane.

13. The scanning optical system according to claim 1, wherein said pair of beams are deviated from the optical surface reference axis of said front lens group by said front lens group in the auxiliary scanning direction.

14. A scanning optical system for dynamically deflecting a plurality of laser beams by a deflecting system for a plurality of scan targets which are provided corresponding to the laser beams and parallelly arranged at preset intervals, converging the dynamically deflected laser beams by an imaging optical system into spot beams on said corresponding scan targets respectively, and thereby scanning the spot beams in a main scanning direction on said corresponding scan targets respectively,

wherein said deflecting system includes at least one reflecting surface which simultaneously deflects the laser beams that are incident on the at least one reflecting surface at incident angles differing in an auxiliary scanning direction perpendicular to the main scanning direction, and

wherein said imaging optical system including:

a front lens group having positive refractive power for converging all the laser beams from said deflecting system principally in the main scanning direction while deflecting at least a pair of laser beams selected from the laser beams so that the pair of laser beams are deviated from an optical surface reference axis of said front lens group in the auxiliary scanning direction; and

a plurality of rear lens groups each of which has positive refractive power for converging each of the laser beams that

passed through said front lens group principally in the auxiliary scanning direction.